

**Appln No. 09/437,580**

**Amdt date August 3, 2005**

**Reply to Office action of June 14, 2005**

**REMARKS/ARGUMENTS**

Claims 26-30, 32-33, 35-44, and 47-50 are now in the application. The Applicants respectfully request reconsideration and allowance of the application in view of the following remarks.

The Examiner has rejected Claims 26-30, 32-33, 35-39, 43, 44, 47, 48, and 50 under 35 U.S.C. §103(a) as allegedly being unpatentable over newly cited reference Watts (USPN 4,412,294) in view of Fumoto (USPN 5,200,738). Claims 40-42 and 49 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Watts. The Applicants respectively traverse these rejections.

Specifically, Claim 26 recites a method for horizontally **scrolling** a display window to the left **by one or more pixels**, the method comprising:

**receiving a header data packet having a numerical value for indicating a number of pixels to be blanked out;**

**receiving an address line of a plurality of graphics data from a memory;**

**placing a read pointer initially on the plurality of graphics data at a start of the address line even if a starting pixel that is to be displayed is not at the start of the address line;**

**blanking out one or more pixels of the plurality of graphics data based on the received header data packet by placing the read pointer on the plurality of graphics data at a location of the address line after the blanked out pixels; and**

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**displaying the plurality of graphics data starting at the read pointer such that the blanked out pixels of the address line of the plurality of graphics data are not displayed and the starting pixel is displayed.** (Emphasis in bold added.)

As such, the Applicants submit that Claim 26 is patentable over Watts (USPN 4,412,294) in view of Fumoto (USPN 5,200,738).

The newly cited Watts reference discloses a form descriptor 2 for configuring one display screen into various vertical or horizontal **split regions** (i.e., splitting the one display screen into various independent split regions). See Fig. 6 and Col. 7, lines 2-49. The form descriptor 2 of Watts is not "**a header data packet having a numerical value for indicating a number of pixels to be blanked out**" nor does the Watts disclosure disclose or suggest "**blanking out one or more pixels** of the plurality of graphics data **based on the received header data packet** by placing the read pointer on the plurality of graphics data **at a location of the address line after the blanked out pixels.**"

Also, to scroll one row of characters in one of the split regions up (or down), Watts discloses using a right attribute (RA) and a left attribute (LA). See FIG. 7 and Col. 8, lines 1-17. The LA is used to point to the display memory location of **the first character in the first row** in the left split region, and the RA is used to point to the display memory location of the first character in the first row in the right split region. See Col 6, lines 50-59. Specifically, to scroll one row of characters in a right split (or partition) region, Watts discloses using its RA to point from the first row to a next successive row (i.e., from **the first character** of the first to

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**the first character** of the next successive row. See Col. 8, lines 1-17. As such, Watts is directed to nothing more than a **whole row** pointer (e.g., RA or LA) for performing a scrolling operation within a particular split region using the RA and/or LA (e.g., scrolling in a right split region using the RA and scrolling in a left split region using the LA). The whole row pointer of Watts accesses or indicates data at a particular row of characters as a whole in the memory for the particular split region. When the pointer is moved, it is moved from one row of characters to the next. The whole row pointer may jump from one row to a non-adjacent row, but regardless of the distance between the memory locations corresponding to the row, the pointer still only indicates the location of the row (or **the first character** of the row) and not a specific pixel or character (other than the first character) within the row. Thus, the Watts reference fails to disclose or suggest numerous limitations of the invention, including, for example, "blanking out one or more pixels of the plurality of graphics data based on the received header data packet by **placing the read pointer on the plurality of graphics data at a location of the address line after the blanked out pixels.**"

As already presented in the Applicants' response dated January 1, 2005, Fumoto discloses or shows moving its addresses (e.g., DPYs) from one address to another address (not from one pixel to another pixel) as a display image is being scrolled. See Fig. 3 of Fumoto. As such, Fumoto is not directed to anything other than a scrolling method (whether vertical or horizontal) for moving from one address to another address (line

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or location) and does not disclose or suggest "**placing a read pointer initially . . . at a start of the address line even if a starting pixel that is to be displayed is not at the start of the address line**" and "**blanking out one or more pixels . . . by placing the read pointer . . . at a location of the address line after the blanked out pixels.**"

Furthermore, Fumoto does not disclose or suggest "**receiving a header data packet having a numerical value for indicating a number of pixels to be blanked out**" and "**blanking out one or more pixels of the plurality of graphics data based on the received header data packet.**"

Accordingly, the Applicants respectfully submit that a *prima facie* case of obviousness has not been established for Claim 26 because Watts alone or combined with Fumoto does not disclose each and every limitation of Claim 26. See MPEP § 2143.03 ("To establish *prima facie* obviousness of a claimed invention, **all** the claim limitations must be taught or suggested by the **prior art.**")

Amended independent Claim 32 should also be allowable for at least the reasons that Watts and/or Fumoto does not show, disclose, or suggest a method for horizontally **scrolling a display window to the right by one or more pixels**, the method comprising:

receiving an **initial** address line of an initial plurality of graphics data from a memory;

receiving a **new** address line of a new plurality of graphics data from the memory;

**placing a read pointer initially** on the initial plurality of graphics data **at a start of the initial**

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address line even if a starting pixel that is to be displayed is at the new address line;

blanking out one or more pixels of the new plurality of graphics data by placing the read pointer on the new plurality of graphics data at a location of the new address line after the blanked out pixels;

inserting the new address line of the new plurality of graphics data in front of the initial address line of the initial plurality of graphics data; and

displaying the new plurality of graphics data and the initial plurality of graphics data starting at the read pointer such that one or more non-blanked out pixels of the new address line and one or more pixels of the initial address line are displayed. (Emphasis in bold added.)

In addition, amended independent Claim 40 should be allowable for at least the reasons that Watts and/or Fumoto does not show, disclose, or suggest a graphics display system **for scrolling by one or more pixels** comprising:

a header data packet having a numerical value for indicating a number of **pixels** to be blanked out;

an address line of a plurality of graphics data;

a display engine **for receiving the header data packet having the numerical value**, for receiving the address line of the plurality of graphics data, **and** for converting the address line of the plurality of graphics data into a graphics window;

a direct memory access module for transferring the address line of the plurality of graphics data from a memory to the display engine;

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**a read pointer initially placed on the plurality of graphics data at a start of the address line even if a starting pixel that is to be displayed is not at the start of the address line; and**

wherein the display engine is capable of **selectively blanking out one or more pixels** of the plurality of graphics data based on the received **header data packet by placing the read pointer on the plurality of graphics data at a location of the address line after the blanked out pixels.** (Emphasis in bold added.)

In a similar manner, amended independent Claim 43 should be allowable for at least the reasons that Watts and/or Fumoto does not show, disclose, or suggest a graphics display system **for scrolling by one or more pixels** comprising:

an initial address line of an initial plurality of graphics data;

a new address line of a new plurality of graphics data stored;

a display engine for receiving the initial and new address lines and for converting the initial and new plurality of graphics data into a graphics window;

a direct memory access module for transferring the initial address line of the initial plurality of graphics data and the new address line of the new plurality of graphics data from a memory to the display engine;

**a read pointer initially placed on the initial plurality of graphics data at a start of the initial address line even if a starting pixel that is to be displayed is at the new address line;**

wherein the display engine is capable of **selectively blanking out one or more pixels** of the new

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plurality of graphics data by placing the read pointer on the new plurality of graphics data at a location of the new address line after the blanked out pixels; and

wherein, to scroll the graphics window to the right, the display engine displays one or more non-blanked out pixels of the new address line in front of one or more pixels of the initial address line.  
(Emphasis in bold added.)

Claims 27-30 depend (directly or indirectly) from Claim 26; Claims 33, 35-39, and 47-48 depend (directly or indirectly) from Claim 32; Claims 41-42 and 49 depend from Claim 40; and Claims 44 and 50 depend from Claim 43. As such, these dependent claims incorporate all the terms and limitations of their respective base claims in addition to other limitations, which together further patentably distinguish them over Watts and/or Fumoto. Therefore, these dependent claims should also now be allowed.

Moreover, dependent Claims 30 and 38 were rejected because the Examiner alleges that Watts "teach GROM (a second number contains 16K bytes (col. 5, line 33-35)." See paragraphs 10 and 18 of the Office Action. The Applicants are not sure of the relevance of GROM (Col. 5, lines 33-35) to recitations of these claims. However, the Applicants would like to respectfully point out that this read-only memory (GROM) is disclosed as a memory for storing a list of instructions and is a separate type of memory from the display memory 96 of Watts associated with the pointers RA and LA. See Col. 1, lines 29-31; Col. 5, lines 14-16; and Col. 6, lines 43-66; see also GROM 52 and display memory 96 in FIGs. 1a and 1b. As such and pursuant to MPEP, the Applicants respectfully request an element-by-element

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examination of each of the claims (including the dependent claims) in the present application with the particular parts(s) of the reference(s) relied upon to be designated as nearly as possible, as well as the reasons(s) for the rejection(s) to be clearly explained so that the record is straight for appeal and/or discussion with the Supervisor Patent Examiner (SPE). See MPEP §706.

In view of the foregoing, the Applicants respectfully submit that Claims 26-30, 32-33, 35-44, and 47-50 are in condition for allowance. Reconsideration and withdrawal of the rejection is respectfully requested, and a timely Notice of Allowability is solicited. If there are any remaining issues that can be addressed over the telephone, the Examiner is encouraged to call the Applicants' attorney at the number listed below.

Respectfully submitted,

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